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DERWENT-WEEK: 199047
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TITLE: Stain-resistant water and oil repellent agent compsn. - comprises water and oil repellent cpds. contg. fluoro:alkyl gps. and silane or titanium coupling agents

PATENT-ASSIGNEE: DAIKIN KOGYO KK[DAIK]

PRIORITY-DATA: 1989JP-0075598 (March 28, 1989)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES |
|---------------|------------------|----------|---------|
| MAIN-IPC | | | |
| JP 02252787 A | October 11, 1990 | N/A | 000 N/A |

APPLICATION-DATA:

| PUB-NO | APPL-DESCRIPTOR | APPL-NO | APPL-DATE |
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| JP02252787A | N/A | 1989JP-0075598 | March 28, 1989 |

INT-CL_(IPC): C09K003/18

ABSTRACTED-PUB-NO: JP02252787A

BASIC-ABSTRACT: A stain-resistant water and oil repellent agent compsn. comprises: water and oil repellent cpd. (A) contg. fluoroalkyl gps. and opt. a polymer (B) contg. no fluoroalkyl gp.; a coupling agent (C) of silane type (C') or titanium type (C").

(A) is pref. a polymer contg. fluoroalkyl gps. and the polymer contains structure units composed of at least one monomer selected from fluoroalkyl gp. contg. unsatd. ester of formula $Rf-R2-OCOCR1=CH2$. Rf is 3-20C polyfluoroalkyl, $R1$ is H, F or $-CH3$, and $R2$ is $-R3-$, $-CON(R4)-Q1-$ or $-SO2N(R4)-Q1-$, where $R3$ is alkylene, $R4$ is H or lower alkyl, and $Q1$ is divalent

organic gp.. (A) may be a urethane cpd. contg. polyfluoroalkyl gp. selected from urethane cpds. of following formula like $RfXOC=(O)NHYNHC=Z$ (I), $(RfXOC=NHYNHC=O)2W$ (II), $RfXOC=ONHYNHC=O-NHYNHC=OOXRf$ (III), and $(RfXOC=ONH)mR1-(NHC=OOR2)n-m$ (IV). Rf is 4-20C fluoroalkyl. X is $-CH2CH(A)CjH2j-$, $-CkH2k-$ or $-SO2N(R)CpH2p-$, where $A=H$, lower alkyl, $-OH$ or lower

alkylcarbonyloxy, j = an integer of 0-4, k and p = each an integer of 1-4, and $R=H$ or lower alkyl. Y denotes divalent organic gp., Z is monovalent organic gp., and W is divalent organic gp.. In (IV), $R1$ denotes n -valent organic gp., $R2$ is lower alkyl, n is an integer of 3-10 and m satisfies n more than m more than = 1. A wt. ratio of (A)/(C')/(C") or (A)/(B)/(C) is 99.999/0.001-90/10 or 10-99.999/0-90/0.001-10.

USE/ADVANTAGE - The agent is using for giving stain-resistant and water and oil repellent properties to various interior prods. like carpets. This agent compsn. contains easily available and inexpensive (C) and is obtd. by blending (A), (C) and opt. (B). The stain resistance is attributed to the synergism

between the water and oil repellent properties of fluoroalkyl gps. and crosslinking and antistatic properties of (C). @ (10pp DWg.No.0/0)@

TITLE-TERMS:

STAIN RESISTANCE WATER OIL REPEL AGENT COMPOSITION COMPRISE WATER OIL REPEL COMPOUND CONTAIN FLUORO ALKYL GROUP SILANE TITANIUM COUPLE AGENT

DERWENT-CLASS: A82 F06 G02

CPI-CODES: A12-D01; A12-D02; A12-G03; F03-C02; F04-D; G02-A05;

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0030 0034 0203 0205 0210 0211 0220 0224 3001 0072 0231 0493 0494
0495 0496 0500 0501 0502 0503 0514 0515 0516 0517 0598 0599 0600 0601 0968
0969

0970 0971 2020 2272 2274 2280 2300 2307 2553 2569 3249 3251 3252 2723 2822
Multipunch Codes: 014 034 04- 05- 062 064 07& 074 076 077 079 081 085 086 09&
090 11- 15- 229 231 26- 27& 273 28& 303 311 318 321 341 342 42- 44& 440 473
477

48- 506 51& 511 53& 532 533 534 535 54& 546 597 600 614 664 688

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